P/35-11

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of : M. Krysiak

Serial No.: 09/510,782 Group Art Unit: 3643

Filed: February 23, 2000 Examiner: S. Nguyen

For: FORTIFIED MULCH

Assistant Commissioner for Patents
Washington, D.C. 20231

DECLARATION OF LEE HOFFMANN

I, Lee Hoffmann declare as follows:

1. I have 27 years of experience in the field of agglomeration with Feeco International.
2. I have reviewed the application of the present invention.
3. I have reviewed the Spittle patent, 5,916,027, and Thomas patent, 4067,140.
4. The process of the present invention is classified as agitation, while the process disclosed and taught by Spittle requires pressure agglomeration.
5. I have read Col. 3 lines 18-30 of the Spittle patent. This section clearly teaches a pressure agglomeration method. Further this section clearly does not teach the method claimed in the present invention. The term "using known granulation equipment" does not teach a method of agitation as taught in the present invention.

6. The mixing and tumbling agglomeration/granulation method differs substantially from the pressure compression extrusi n method described in Col. 3 of Spittle.

7. As shown in the publications previously submitted by the applicant, there are different types of agglomeration/granulation and each of these methods uses different types of equipment and creates substantially different types of products.

8. The claims of the present invention teach a mixing and tumbling agglomeration/granulation that creates a homogenous blend of paper product and fortifiers.

9. The mixer described in the present invention imports agitation forces on the contents of the mixer causing a tumbling, turbulent movement resulting in densification of the product.

10. Spittle does not teach or make obvious the process and product taught by the claims of the present invention.

11. As stated in my previous Declaration, there are four very distinct types of agglomeration, which use very specific equipment and produce very specific products. A person of knowledgeable in agglomeration would not use the equipment described in Thomas to modify Spittle.

12. Spittle uses a pressure agglomeration process. There is nothing taught in Spittle regarding the use of a binding agent. Further, there is no reason that a binding agent would be useful to the mulch produced by Spittle since Spittle uses pressure to form and keep the mulch together.

13. The Spittle process as defined is a multi-step process. The materials are combined, pelletized and then flaked. The Spittle process, requires the use of

pressure equipment to form the pellets. In order to form a flake from a pellet, the pellet must be sheared to form thin flakes with ancillary equipment. In contrast, the mulch agglomeration process of the present invention is a single step tumble process that utilizes a high speed mixer, not pressure, to form granules.

14. I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the patent application to which it relates or any patent issued thereon.

Dated: 5/9/03

Lee Hoffmann

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Assistant Commissioner for Patents
Washington, D.C. 20231

DECLARATION OF LEE HOFFMAN

I, Lee Hoffman declare as follows:

1. I have 26 years of experience in the field of agglomeration with Feeco International.
2. I have reviewed the application of the present invention.
3. I have reviewed the Spittle patent, 5,916,027.
4. In the world of agglomeration (particle size enlargement), there are four distinctively different types of processes: agitation, pressure, liquid and thermal.
5. The process of the present invention is classified as agitation, while the process discloses and taught by Spittle requires pressure agglomeration. This can be more clearly understood when the methods and equipment used to produce such products are explained below.
6. Agitation:
   This process is defined as agglomeration by tumbling (growth). Particles are adhered together by use of balling drums, pans, cones and mixers via impact and tumbling. The resultant shape is a sphere.
7. Pressure
   Pressure agglomeration utilizes methods such as extrusion presses, pelleting machines (pelletized), piston presses (tabletting), and roller presses (briquetting, compacting). The pellets are formed by pressure imparted upon the materials. The resultant shape is a cylinder for products made with pelleting machines and extrusion presses.
8. Liquid
   With the liquid process, the liquid spray solidifies into a solid.
9. Thermal
   Thermal agglomeration requires the addition of an external heat source to result in particle bonding. Typical applications include sintering, induration, calcining, and a form of flaking (different from Spittle). This thermal flaking requires a device that spreads a paste or melt as a thin film on the surface of a rotating drum: the film is then solidified by cooling water and scraped off the drum as flakes.
10. The Spittle process as defined is a multi-step process. The materials are combined, pelletized and then flaked. The Spittle process, though not entirely

outlined in the referenced patent, requires the use of some form of pressure equipment to form the pellets. In order to form a flake from a pellet, the pellet must be sheared to form thin flakes with ancillary equipment. In contrast, the mulch agglomeration process of the present invention is a single step tumble process that utilizes a high speed mixer, not pressure, to form granules.

11. The process described in the Spittle patent from Column 3 lines 6-30 is a pressure agglomeration technique.

12. I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the patent application to which it relates or any patent issued thereon.

Dated: 9/15/02

Lee Hoffman

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Filed: February 23, 2000 Examiner: S. Nguyen

For: FORTIFIED MULCH

Assistant Commissioner for Patents
Washington, D.C. 20231

DECLARATION OF WILLIAM ENGELLEITNER

I, William Engelleitner declare as follows:

1. I have 45 years of experience in the field of agglomeration, size enlargement.
2. I have a BS in Mechanical Engineering
3. I have reviewed the application of the present invention.
4. I have reviewed the Spittle patent, 5,916,027, and Thomas patent, 4067,140.
5. I am the course director for the Center of Professional Advancement since 1974 for the Course regarding Briquetting, Pelletizing, Extrusion, and Fluid Bed/Spray Granulation. Information concerning this course was previously provided to the Exmainer. As shown by this material, there are several different types of agglomeration each of which uses specific equipment which produces substantially different types of products.
6. The process of the present invention is classified as agitation or tumble, while the process disclosed and taught by Spittle requires pressure agglomeration.

7. I have read Col. 3 lines 18-30 of the Spittle patent. This section clearly teaches a pressure agglomeration method. Further this section clearly does not teach the method claimed in the present invention. The term "using known granulation equipment" does not teach a method of agitation as taught in the present invention.

8. The mixing and tumbling agglomeration/granulation method differs substantially from the pressure compression extrusion method described in Col. 3 of Spittle.

9. The claims of the present invention teach a mixing and tumbling agglomeration/granulation that creates a homogenous blend of paper product and fortifiers.

10. The mixer described in the present invention imports agitation forces on the contents of the mixer causing a tumbling, turbulent movement resulting in densification of the product.

11. Spittle does not teach or make obvious the process and product taught by the claims of the present invention.

12. Spittle uses a pressure agglomeration process. There is nothing taught in Spittle regarding the use of a binding agent. Further, there is no reason that a binding agent would be useful to the mulch produced by Spittle since Spittle uses pressure to form and keep the mulch together.

13. The Spittle process as defined is a multi-step process. The materials are combined, pelletized and then flaked. The Spittle process, requires the use of pressure equipment to form the pellets. In order to form a flake from a pellet, the pellet must be sheared to form thin flakes with ancillary equipment. In contrast,